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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/616,471 07/09/2003 Dan L. Wensel 951197.00002 9618 26707 7590 02/11/2005 **EXAMINER QUARLES & BRADY LLP** ALIE, GHASSEM RENAISSANCE ONE ART UNIT PAPER NUMBER TWO NORTH CENTRAL AVENUE PHOENIX, AZ 85004-2391 3724

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<del></del>	Application N	lo.	Applicant(s)	
Office Action Summary	10/616,471	,	WENSEL ET AL.	w.
	Examiner		Art Unit	
	Ghassem Alie	)	3724	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
<ol> <li>Responsive to communication(s) filed on 20 January 2005.</li> <li>This action is FINAL.</li> <li>Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.</li> </ol>				
Disposition of Claims				
<ul> <li>4)  Claim(s) 1-26 is/are pending in the application.</li> <li>4a) Of the above claim(s) 3, 6, and 16-26 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1,2,4 and 6-15 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>				
Application Papers				
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on <u>09 July 2003</u> is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-9483)  Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date 07/09/03.	B/08) 5)	Interview Summary (F Paper No(s)/Mail Date Notice of Informal Pa	е	-152)

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#### Election/Restrictions

- 1. Applicant's election of group I and Species III (Fig. 3) on 01/20/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
- 2. Claims 3, 6, and 16-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made without traverse on 01/20/05.

### **Drawings**

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, an adjustable handle as set forth in claim 15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should

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be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Objections

4. Claim 14 is objected to because of the following informalities: on line 1, "further comprising a handle" is redundant, since "a handle shaft" in reference to the handle is already recited in claim 1. Appropriate correction is required.

# Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claim 15, the disclosure fails teach how the handle is adjustable. It is not clear what type of adjustable mechanism is used to adjust the handle. In fact, it is not clear that whether the handle is vertically adjustable (as shown in Schutz 5,301,378) or angularly adjustable (as shown in Bellegante (5,261,164). The disclosure fails to teach what makes the handle adjustable or what encompasses the adjustable mechanism for the handle.

# Claim Rejections - 35 USC § 102

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

a person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 7, 9, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hung (D457,792). Regarding claim 1, Hung teaches everything as set forth in claim 1 including an axe blade having a cutting edge and a notched edge. The cutting edge is defined by the cutting edge located opposite side of the toothed edge or the front blade. The notch edge also defined by the notch on lateral side of the axe blade near the handle mount portion as best shown in Fig. 5. Hung also teaches that the front blade includes substantially flat upper and lower surfaces, a lateral edge substantially perpendicular to the upper surface and the lower surface, and a tooted edge which is located on the extremity opposed the cutting edge of the axe blade. See Figs. 1-7 in Hung.

It should be noted that patents to Shandel (3,824,641) and Lemerse (FR 2631576) also read on claim 1.

Regarding claim 7, Hung teaches everything noted above including that a second notch edge. The second notch is defined by the both notched on lateral sides of the axe blade near the mounting portion of the axe blade. See Fig. 5 in Hung.

Regarding claims 9, 12, 13, and 14, Hung teaches everything noted above including that the toothed edge of the front blade includes a plurality of teeth and the axe blade, the handle mount, and the front blade are contiguous. Hung also teaches that the firefighting implement is inherently cast into a single piece of metal and the implement has a handle.

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# Claim Rejections - 35 USC § 103

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- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claim 1, 5, and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shugart (1,404,660) in view of Shandel (3,824,641) or Stephens (1,265,276). Regarding claim 1, Shugart teaches an implement that is capable of being used an a firefighting implement and includes an axe blade 3, wherein the axe blade 3 includes a cutting edge 4 and a notch edge 7. Shugart also teaches a handle mount 1 coupled to the axe blade at a surface opposed to the cutting edge 4 of the axe blade 3, wherein the handle mount 1 is capable of being coupled to a handle shaft 2. Shugart also teaches a front blade 5 coupled to the handle mount at a surface away from the axe blade 3, wherein the front blade 5 includes a substantially flat upper and lower surfaces and a lateral edge, which is substantially perpendicular to the upper and lower surfaces. Shugart also teaches that the front blade has a cutting edge 6. See Figs. 1-4 and page 1, lines 2-92 in Shugart. Shugart does not expressly teach that the front blade has a toothed edge. However, the use of a toothed edges in an axe or the like is well known in the art such as taught by Shandel or Stephens. Shandel teaches an axe 1 that includes axe blade 3 and a flat front blade having a toothed edge 32. See Figs. 3-4 and col. 1, lines 39-68 and col. 2, lines 1-48 in Shandel. Stephens also teaches an axe including an axe blade 5 and a front blade 7 having a toothed edge 11 and 12. See Figs. 1-3 and page 1, lines 1-101 in Stephens. It would have been obvious to a person of ordinary skill

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in the art to provide the front blade of Shugart's firefighting implement with the toothed edge as taught by Shandel or Stephens in order to adapt the axe to cut different types of desired material such as wood.

Regarding claim 5, Shugart teaches everything noted above including that the notch edge 7 is the lower surface of the axe blade 3.

Regarding claim 9, Shugart as modified above teaches that the front blade includes a plurality of teeth.

Regarding claims 10 and 11, Shugart as modified above teaches everything noted above except that the front blade and the axe blade include titanium. However, Official notice is taken that the use of an axe head made of a durable material such as titanium is well known in the art such as taught by Hoogland (6,568,016). Hoogland teaches an axe head 14 made of titanium. See Fig. 1 and col. 2, lines 49-64 in Hoogland.

Regarding claims 12-14, Shugart teaches everything noted above including that the axe blade, the handle mount, and the front blade are contiguous. Shugart also teaches that the firefighting implement is cast into a single piece of metal and the implement has a handle 2.

Regarding claim 15, ás best understood, Shugart as modified above teaches everything noted above except that the handle is adjustable. However, Official notice is taken that the use if adjustable handle in axes is well known in the art such as taught by Bellegante (5,261,164) or Schultz (5,301,378).

11. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shugart in view of Shandel or Stephens, as applied to claim 1, and in further view of Tarran (4,287,623). Regarding claims 2 and 4, Shugart as modified above teaches everything noted

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above except that firefighting implement has a socket capable of loosing fire hydrant bolts. However, the use of sockets in firefighting or emergency implement is well known in the art such as taught by Tarran. Tarran teaches a firefighting implement including a socket 108 for receiving a fire hydrant shut-off valve. See Fig. 5 and col. 8, lines 31-44 in Tarran. It would have been obvious to a person of ordinary skill in the art to provide Shugart's firefighting implement, as modified above, with the socket as taught by Tarran in order to loose the fire hydrant shut-off valve or bolts during an emergency situation.

Claim 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shugart in view of Shandel or Stephens, as applied to claim 1, and in further view of Roxton (6,397,420) or Fried (3,219,316). Shugart as modified above teaches everything noted above except that the axe blade includes a second notch or plurality of notches. However, the use of an axe including an axe blade having a plurality of notches are well known in the art such as taught by Roxton or Fried. Roxton teaches an axe head 14 including an axe blade 16 having a plurality of notches. See Fig. 1 and col. col. 3, lines 25-67 in Roxton. Fried also teaches an axe head including an axe blade 13 having a plurality of notches 14. See Figs. 1-4 and col. 3, lines 1-68 in Fried. It would have been obvious to a person of ordinary skill in the art to provide the axe blade of Shugart's firefighting implement, as modified above, with the plurality of notches as taught by Roxton or Fried in order to cut the material such as wood in a sawing manner.

#### Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Carroll, Sr. (3,599,255), Arnsbarger (120,609), Cloncs (4,456,044), Druskin et al. (4,214,538), Trujillo (5,315,724), Rich (1,942,901), Kortick (1,749,103), Funke (1,884,990), Lucan (3,952,812), Hagqvist (3,623,173), Herron (1,280,465), Morgan (5,345,635), Chen (Des. 380,654), Khachatoorian (D440,834) teach a firefighting implement.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (too-free).

Allan M. Shoap Supervisory Patent Examiner Group 3700

GA/ga

February 8, 2005